

IN THE CLAIMS

1-13. (cancelled)

14. (currently amended) A process for the production of an electrochromic coating on a substrate by ~~chemical~~ cathode sputtering of a target consisting of tungsten or a tungsten alloy or containing at least one of Molybdenum, Titanium, Cerium, Vanadium and Zirconium, in a coating atmosphere containing a noble gas ~~and hydrogen ions~~, wherein at least one gaseous hydrocarbon is added to the coating atmosphere.

15. (previously presented) A process according to claim 14, wherein said noble gas is argon.

16. (previously presented) A process according to claim 14, wherein said at least one gaseous hydrocarbon is a saturated hydrocarbon.

17. (previously presented) A process according to claim 16, wherein said saturated hydrocarbon is methane.

18. (previously presented) A process according to claim 16, wherein said saturated hydrocarbon is selected from the group consisting of ethane, propane and butane.

19. (previously presented) A process according to claim 14, wherein oxygen is additionally added to the coating atmosphere.

20. (previously presented) A process according to claim 19, wherein the volumetric ratio of added hydrocarbon to added oxygen is in the range of 3:1 to 1:3.

21. (previously presented) A process according to claim 19, wherein the volumetric ratio of added hydrocarbon to added oxygen is 1:1.

22. (previously presented) A process according to claim 19, wherein the volumetric ratio of noble gas to oxygen is in the range of 3:1 to 1:3

23. (previously presented) A process according to claim 22, wherein said noble gas is argon.

24. (previously presented) A process according to claim 22, wherein the volumetric ratio of noble gas to oxygen is 1:1.

25. (previously presented) A process according to claim 14, wherein operation takes place at a total pressure of the coating atmosphere of  $0.3 \times 10^{-2}$  mbar to  $10^{-1}$  mbar.

26. (previously presented) A process according to claim 25, wherein operation takes place at a total pressure of the coating atmosphere of  $1 \times 10^{-2}$  mbar to  $4 \times 10^{-2}$  mbar.

27-28 (cancelled)

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29. (previously presented) A process according to claim 14, wherein the electrochromic coating is applied to a thickness in the range of 50 nm to 500 nm.